

January 7, 2002

Mr. Robert Mead
Precoat Metals, division Sequa Coatings Corporation
4800 South Kilbourn
Chicago, Illinois 60632

Re: 127-15225
First Administrative Amendment to
Part 70 127-6025-00005

Dear Mr. Mead:

Precoat Metals, division Sequa Coatings Corporation, located at U.S. 12 & Indiana 249, Postage, Indiana 46368 was issued a Part 70 permit on February 10, 1999 for a metal coil coating operation. A letter requesting a change in the permit was received on November 28, 2001. Pursuant to 326 IAC 2-7-11, the change which involves the deletions of the NSPS applicability that was incorrectly applied, qualifies as correcting a "typographical error" and the deferral to the stack testing requirement in Condition D.1.7 qualifies as "a change to a monitoring..... that is not environmentally significant".

1. Precoat Metals was issued a Significant Source Modification (127-11613-00005) on April 5, 2000. This permit incorrectly applied 326 IAC 12 (40 CFR 60.460, Subpart TT - Standards of Performance for Metal Coil Surface coating). Although, the source applied for an expansion to their NSPS grandfathered metal coil coating line, this permit did not allow for this modification, and therefore should not be subject to NSPS. Additionally the source requested a deferral for 120 days to the stack testing required in Condition D.1.7, because the oxidizer has not yet been installed due to many engineering problems encountered by the manufacturer during its design. This stack testing deferral has been referred to the Compliance Data Section, and will allow the source to perform the stack testing no later than June 30, 2002. Therefore, Amendment is as follows (changes are bolded and deletions are struck-through for emphasis):

D.1.1 No Changes

~~D.1.2 General Provisions Relating to NSPS [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]~~

~~The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart TT.~~

~~D.1.3 Metal Coil Surface Coating NSPS [326 IAC 12-1-1] [40 CFR 60, Subpart TT]~~

~~This coil coating line is subject to 40 CFR 60, Subpart TT, which is incorporated by reference in 326 IAC 12-1-1. A copy of the rule is attached.~~

- ~~(a) Either the recuperative thermal oxidizer, identified as EU4/CE-1 and/or the direct flame finish oxidizer, rated at 30.0 million British thermal units per hour, identified as EU8/CE-2 shall be used continuously, i.e., at all times that the facility is operated, and operated at the most recently demonstrated overall efficiency.~~

- ~~(b) The Permittee shall not cause to be discharged from the facility into the atmosphere more than:~~

-
- (1) ~~0.28 kilogram VOC per liter (kg/l) of coating solids applied for each calendar month for each affected facility that does not use an emission control device; or~~
-
- (2) ~~0.14 kilogram VOC per liter (kg/l) of coating solids applied for each calendar month for each affected facility that continuously uses an emission control device operated at the most recently demonstrated overall efficiency; or~~
-
- (3) ~~Ten (10%) percent of the VOC applied for each calendar month (ninety (90%) percent emission reduction) for each affected facility that continuously uses an emission control device operated at the most recently demonstrated overall efficiency; or~~
-
- (4) ~~A value between 0.14 (or a ninety (90%) percent emission reduction) and 0.28 kilogram VOC per liter (kg/l) of coating solids applied for each calendar month for each affected facility that intermittently uses an emission control device operated at the most recently demonstrated overall efficiency.~~

D.1.4, is now D.1.2; D.1.5, is now D.1.3

D.1.6 4 Nonapplicable Requirements [326 IAC 2-7-15(a)(2)]

The requirements that are not applicable to this coil coating line in accordance with Section B - Permit Shield, of this permit and 326 IAC 2-7-15 have been determined to be as follows:

- (a) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 63) applicable to this coil coating operation. As of permit issuance, there is no NESHAP applicable for coil coating operations.
- (b) This coil coating line is not subject to 326 IAC 8-6-2, since the source was constructed in 1971, which was before the October 7, 1974 applicability date of the rule.
- (c) This coil coating line is not subject to 326 IAC 8-7. Even though the source has potential emissions greater than ten (10) tons per year, since the coil coating line is subject to 326 IAC 8-2-4, it is therefore, not subject to the requirements of 326 IAC 8-7.
- (d) **This coil coating line is not subject to 326 IAC 12-1-1 and 40 CFR 60, Subpart TT - Standards of Performance for Metal Coil Surface Coating, since the line was constructed in 1971, and has not been reconstructed or modified after the January 5, 1981 applicability date of the rule.**

Compliance Determination Requirements [326 IAC 2-7-6(1) [326 IAC 2-1.1-11]

D.1.7 5 Testing Requirements [326 IAC 8-1-4] [326 IAC 2-7-6(1)] [326 IAC 2-1.1-11]

Compliance stack tests shall be performed within 60 days upon installation of the regenerative thermal oxidizer, but no later than ~~270 days from the issuance of this First Administrative Amendment~~ **June 30, 2002**. The tests shall be made on the coil coating line, consisting of the prime coating section, identified as EU1 with its regenerative thermal oxidizer, identified as EU4/CE-1 and the finish coating section, identified as EU5 with its recuperative thermal oxidizer, identified as EU8/CE-2 according to 326 IAC 3-6 (Source Sampling Procedures) using the methods specified in the rule or using other methods as approved by the Commissioner to demonstrate compliance with 326 IAC 8-2-4 (Surface coating emission limitations: coil coating

operations). This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to this requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

~~D.1.8 Testing Requirements [326 IAC 2-7-6(1)] [326 IAC 2-1.1-11] [326 IAC 12, 40 CFR 60.463, NSPS Subpart TT]~~

~~To determine compliance with Condition D.1.3, the Permittee shall complete and/or maintain the following requirements:~~

- ~~(a) The Permittee shall conduct an initial performance test as required under 40 CFR 60.8(a) and thereafter a performance test for each calendar month for each affected facility according to the procedures in this section.~~
- ~~(b) 40 CFR 60.8(d) and (f) do not apply to the performance test.~~
- ~~(c) The Permittee shall use the following procedures for determining monthly volume-weighted average emissions of VOC's in kg/l of coating solids applied:~~
 - ~~(1) Determine the overall reduction efficiency (R) for the capture system and control devices, using procedures specified in 40 CFR 60.463(c)(2)(i).~~
 - ~~(2) Calculate the volume-weighted average of the total mass of VOC's per unit volume of coating applied (G) during each calendar month for each affected facility using equations in 40 CFR 60.463(c)(1)(i)(A), (B), and (C).~~
 - ~~(3) Calculate the volume-weight average VOC emissions to the atmosphere (N) for each calendar month by the following equation:~~
~~$$N = G \cdot (1 - R)$$~~
 - ~~(4) If the volume-weighted average mass of VOC's emitted to the atmosphere for each calendar month (N) is less than or equal to 0.14 kg/l of coating solids applied, the affected facility is in compliance. Each monthly calculation is a performance test.~~

D.1.9 6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, ~~ΘAM~~ **OAQ**, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.10 7 Monitoring (326 IAC 8-2-4)

- (a) The recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2 for VOC control shall be in operation at all times when necessary to comply with the emission limitation specified in Condition D.1.1.
- (b) When operating, both the recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2 shall maintain a minimum operating temperature of 1,150EF for the recuperative thermal oxidizer and 1,200EF for the direct flame finish oxidizer or a minimum temperature, fan amperage and duct velocity as determined by the compliance tests required in Conditions D.1.7 and D.1.8. These minimum operating temperatures are required in order to maintain a minimum

destruction efficiency of 86.02% and a minimum capture efficiency of 86.02%.

- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (d) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with 0.31 kilograms per liter of coating excluding water (2.6 pounds per gallon).
 - (1) This device shall have an accuracy of $\pm 2.5^{\circ}\text{C}$ or ± 0.75 percent of the temperature being measured expressed in degrees Celsius, which is greater.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

~~D.1.11 Monitoring Requirements [326 IAC 12, 40 CFR 60.464]~~

~~The Permittee shall:~~

~~Install, calibrate, operate, and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with Condition D.1.3. This device shall have an accuracy of $\pm 2.5^{\circ}\text{C}$ or ± 0.75 percent of the temperature being measured expressed in degrees Celsius, whichever is greater.~~

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

~~D.1.12 Record Keeping Requirements [326 IAC 8-1-2] [326 IAC 12-1-1] [40 CFR 60, Subpart TT]~~

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day that any coating with VOC content greater than 2.6 pounds per gallon is used, by:
$$\frac{\text{lb VOC}}{\text{gallon less water}} = \frac{3 \text{ coatings } [Dc * O * Q / (1-W * Dc / Dw)]}{3C}$$

Dc = density of coating, lb/gal

O = weight percent organics, %

W = percent volume of water, %

Dw = density of water, lb/gal

Q = quantity of coating, gal/unit

C = total of coatings used, gal/unit
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each month; and

- (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Conditions D.1.1 and D.1.10(a), the Permittee shall record the dates and times, on an hourly basis, of all periods of startup and shutdown of the recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2.
- (c) To document compliance with Conditions D.1.1 and D.1.10(a), the Permittee shall record the dates and times, on an hourly basis, of all periods of changeout of coatings when the recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2 are not being used.
- (d) To document compliance with Conditions D.1.1 and D.1.10(b), the Permittee shall also record all periods (during actual coating operations) in excess of three (3) hours during which the average temperature in EU4/CE-1 or EU8/CE-2 (the oxidizers used to control emissions) remains more than 28EC (50EF) below the temperature at which compliance with 0.31 kilograms per liter of coating excluding water (2.6 pounds per gallon) was demonstrated during the most recent measurement of oxidizer efficiency required by D.1.7. The records shall identify each such occurrence and its duration.
- (e) ~~To document compliance with Condition D.1.3 and Condition D.1.8, the Permittee shall maintain at the source, for a period of at least two years, records of all data and calculations used to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable. The Permittee shall maintain at the source daily records of the recuperative thermal oxidizer and the direct flame finish oxidizer combustion temperatures.~~
- (f) ~~Record all periods (during actual coating operations) in excess of 3 hours during which the average temperature in the recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2 used to control emissions from an effected facility remains more than 28 degrees Celsius (50 degrees Fahrenheit) below the temperature at which compliance with 60.462(a)(2) or (3) was demonstrated during the most recent measurement of thermal oxidizer efficiency required by 40 CFR 60.8. The records required by 40 CFR 60.7 shall identify each such occurrence and its duration.~~
- (g e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements [326 IAC 12, 40 CFR 60.465]

- (a) ~~The Permittee shall include the following data in the initial compliance report required by 40 CFR 60.8:~~
- ~~(1) The overall VOC destruction rate; and~~
- ~~(2) The combustion temperature of the recuperative thermal oxidizer and the direct flame finish oxidizer~~
- ~~used to attain compliance with Condition D.1.3.~~
- (b) ~~Following the initial performance test, the Permittee shall identify, record, and submit a~~

~~written report to IDEM, OAQ every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under Condition D.1.3. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to IDEM, OAQ semiannually.~~

- ~~(c) The Permittee shall also submit reports at the frequency specified in 40 CFR 60.7(c) when the recuperative thermal oxidizer and the direct flame finish oxidizer temperatures drop as defined by Condition D.1.11(b). If no such periods occur, the Permittee shall state that in the report.~~
2. The plant will not be installing the 25.11 mmBtu/hr boiler that was proposed to replace the existing 10.99 mmBtu/hr boiler permitted in the original Part 70 permit. Therefore, Sections A.2 and D.2 will be amended to change back the heat input to the original permitted capacity. State and Federal Rule applicability will also be changed back to what was determined in the original Part 70 permit.

State Rule Applicability - Individual Facilities

326 IAC 6-2-2 (PM Limitations for Sources of Indirect Heating)

- (a) The 10.99 mmBtu/hr process boiler, identified as EU9, and the insignificant 9.7 mmBtu/hr waste heat boiler were constructed in 1971 and are located in Porter county and are therefore subject to 326 IAC 6-2-2, which states that particulate emissions shall be limited by the following equation:

$$Pt = \frac{0.87}{Q^{0.16}}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu/hr) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.

For Q less than or equal to 10 mmBtu/hr, Pt shall not exceed 0.6. For Q greater than or equal to 10,000 mmBtu/hr, Pt shall not exceed 0.2.

- (b) The emission limitations shall be calculated using the equation in (a) where: Q shall reflect the total source capacity on June 8, 1972. The resulting Pt is the emission limitation for each facility existing on that date and will not be affected by the addition of any subsequent facility.

$$Pt = 0.87 / (10.99 + 9.7)^{0.16} = 0.87 / (20.69)^{0.16} = 0.53579 \text{ lb/mmBtu}$$

Boiler EU09 (10.99 mmBtu/hr):

0.5778 tons/yr, PM emission * 2000 lb/ton * yr/96.3 MMCF, throughput * MMCF/1000 mmBtu = 0.012 lb/mmBtu
Therefore, the boiler is in compliance since 0.012 lb/mmBtu is less than 0.53579 lb/mmBtu

Waste Heat Boiler (9.7 mmBtu/hr):

0.51 tons/yr, PM emission * 2000 lb/ton * yr/85 MMCF, throughput * MMCF/1000 mmBtu = 0.012 lb/mmBtu
Therefore, the boiler is in compliance since 0.012 lb/mmBtu is less than 0.53579 lb/mmBtu

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary metal coil coating source consists of the following emission units and pollution control devices:

- (2) ~~One (1) natural gas-fired process boiler, identified as EU9, rated at 25.1 million British thermal units per hour, exhausting to Stack S-5.~~ **One (1) 10.99 mmBtu/hr natural gas process boiler, identified as EU9, constructed in 1971.**

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

~~One (1) natural gas-fired process boiler, identified as EU9, rated at 25.1 million British thermal units per hour, exhausting to Stack S-5.~~ **One (1) 10.99 mmBtu/hr natural gas process boiler, identified as EU9, constructed in 1971, exhausting to one (1) stack, identified as S-5.**

Insignificant Activities

One (1) 9.7 mmBtu/hr waste heat boiler.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from the 10.99 mmBtu per hour process boiler and the 9.7 mmBtu/hr per hour waste heat boiler shall be limited to 0.5358 pounds per mmBtu heat input.

- (a) This limitation is based on the following equation:

$$P_t = \frac{0.87}{Q^{0.16}}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu per hour (lb/mmBtu/hr) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.

- (b) The emission limitations shall be calculated using the equation in (a) where: Q shall reflect the total source capacity on June 8, 1972. The resulting Pt is the emission limitation for each facility existing on that date and will not be affected by the addition of any subsequent facility.

~~D.2.1 Nitrogen Oxides (NO_x) [326 IAC 2-3]~~

~~The total input of natural gas to the process boiler, identified as EU9, shall be limited to less than 205.5 million cubic feet per twelve (12) consecutive month period. This fuel limit combined with the unlimited potential to emit from the direct flame finish oxidizer and infrared oven (deemed an insignificant activity with no rules) is equivalent to less than twenty-five (25.0) tons per twelve (12) consecutive month period of NO_x.~~

~~D.2.2 Particulate Matter (PM) [326 IAC 6-2-4]~~

~~Pursuant to 326 IAC 6-2-4 (Emission limitations for facilities specified in 326 IAC 6-2-1(c)), the PM emissions from the 25.1 million British thermal units per hour process boiler shall be limited to 0.376 pounds per million British thermal units heat input as calculated by the following equation:~~

~~$$Pt = \frac{0.87}{Q^{0.26}}$$~~

~~Where:~~

~~Pt = Pounds of particulate matter emitted per million British thermal units.~~

~~Q = Total source maximum operating capacity rating in million British thermal units heat input. The maximum operating capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.~~

D.2.2 Nonapplicable Requirements [326 IAC 2-7-15(a)(2)]

The requirements that are not applicable to this boiler in accordance with Section B - Permit Shield, of this permit and 326 IAC 2-7-15 have been determined to be as follows:

- (a) This natural gas fired process boiler is not subject to the requirements of the New Source Performance Standard 326 IAC 12, 40 CFR 60.40c, Subpart Dc, because the boiler was constructed in 1971, which was before the January 5, 1981 applicability date of the rule.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 63) applicable to this boiler. As of permit issuance, there is no NESHAP applicable for boilers.

~~D.2.3 Non-applicable Requirements [326 IAC 2-7-15(a)(2)]~~

~~The requirement that is not applicable to this process boiler in accordance with Section B - Permit Shield, of this permit and 326 IAC 2-7-15 has been determined to be as follows:~~

~~There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 63) applicable to the natural gas-fired process boiler, known as EU9. As of permit issuance, there is no NESHAP applicable for natural gas combustion facilities.~~

Compliance Determination Requirement

D.2.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

~~D.2.4 Testing Requirements [326 IAC 2-7-6(1)] [326 IAC 2-1.1-11]~~

~~The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~

D.2.4 Natural Gas Fired Boiler Certification

An annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, no later than April 15 of each year.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

~~D.2.6 Record Keeping Requirements [40CFR 60.40c, NSPS Subpart Dc]~~

~~(a) To document compliance with Condition D.2.1 and NSPS Subpart Dc, the Permittee shall maintain records in accordance with (1) through (3) below:~~

~~(1) Calendar dates covered in the compliance determination period;~~

~~(2) Type of fuel combusted in the process boiler, and~~

- ~~_____ (3) Actual natural gas consumption in the process boiler.~~
- ~~_____ (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

~~D.2.7 Reporting Requirements~~

~~_____ A quarterly summary to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. These reports shall include the amount of natural gas consumption each month. All records and reports shall use calendar months.~~

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman, at (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

APD

cc: File - Porter County
U.S. EPA, Region V
Porter County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Dave Sampias
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

Precoat Metals division Sequa Coatings Corporation U.S. Highway 12 and Route 249 Portage, Indiana 46368

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T127-6025-00005	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 10, 1999
First Significant Permit Modification: SSM 127-11786, issued on April 5, 2000 First Administrative Amendment: AA 127-14061, issued on May 15, 2001	
Second Administrative Amendment: AA 127-15225	Pages affected: 4, 28, 29, 30, 31, 32, 33 Pages deleted: 29a, 31a
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:January 7, 2002

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a metal coil coating operation.

Responsible Official: David A. Leligdon
Source Address: U.S. Highway 12 and Route 249, Portage, Indiana 46368
Mailing Address: 1310 Papin Street, Third Floor, St. Louis, Missouri 63103
SIC Code: 3479
County Location: Porter
County Status: Nonattainment for Ozone, NOx and TSP
Source Status: Part 70 Permit Program
Major Source, under PSD and Emission Offset Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary metal coil coating source consists of the following emission units and pollution control devices:

- (1) One (1) coil coating line consisting of the following:
 - (a) A Prime Coating Section (PCS), constructed in 1971, consisting of one (1) prime coater, identified as EU1, with a maximum capacity of 883 lb VOC/hr, using one (1) 18.2 million British thermal units/hr recuperative thermal oxidizer, identified as EU4/CE-1, as control with a maximum capacity of 2.0 gal VOC/min, one (1) 33.6 million British thermal units/hr prime curing oven, identified as EU2, all exhausting to one (1) stack, identified as S-1, and one (1) prime water cooler, identified as EU3, exhausting to one (1) stack, identified as S-2.
 - (b) A Finish Coating Section (FCS), constructed in 1971, consisting of one (1) finish coater, identified as EU5, with a maximum capacity of 1142 lb VOC/hr, using one (1) direct flame finish oxidizer, rated at 30.0 million British thermal units per hour, identified as EU8/CE-2, as control with a maximum capacity of 3.75 gal VOC/min with heat exhausting to a waste heat boiler exhausting to stack S-14, one (1) 37.6 mmBtu/hr finish curing oven, identified as EU6, all exhausting to one (1) stack, identified as S-3, and one (1) finish water cooler, identified as EU7, exhausting to one (1) stack, identified as S-4.
- (2) One (1) natural gas-fired process boiler, identified as EU9, rated at 10.99 million British thermal units per hour, exhausting to Stack S-5.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary metal coil coating source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) coil coating line consisting of the following:
- (a) A Prime Coating Section (PCS), constructed in 1971, consisting of one (1) prime coater, identified as EU1, with a maximum capacity of 883 lb VOC/hr, using one (1) 18.2 mmBtu/hr recuperative thermal oxidizer, identified as EU4/CE-1, as control with a maximum capacity of 2.0 gal VOC/min, one (1) 33.6 mmBtu/hr prime curing oven, identified as EU2, all exhausting to one (1) stack, identified as S-1, and one (1) prime water cooler, identified as EU3, exhausting to one (1) stack, identified as S-2.
 - (b) A Finish Coating Section (FCS), constructed in 1971, consisting of one (1) finish coater, identified as EU5, with a maximum capacity of 1142 lb VOC/hr, using one (1) direct flame finish oxidizer, rated at 30.0 million British thermal units per hour, identified as EU8/CE-2, as control with a maximum capacity of 3.75 gal VOC/min with heat exhausting to a waste heat boiler exhausting to stack S-14, one (1) 37.6 mmBtu/hr finish curing oven, identified as EU6, all exhausting to one (1) stack, identified as S-3, and one (1) finish water cooler, identified as EU7, exhausting to one (1) stack, identified as S-4.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Coil Coating Operations [326 IAC 8-2-4] [326 IAC 8-1-2]

- (a) Pursuant to OP No. 3420-0005-0262, issued on October 31, 1990 and 326 IAC 8-2-4 (Coil Coating Operations), the VOC discharged into the atmosphere from the coil coating line shall not exceed of 0.31 kilograms per liter of coating (2.6 pounds per gallon) excluding water.
- (b) When operating either the recuperative thermal oxidizer, identified as EU4/CE-1 and/or the direct flame finish oxidizer, identified as EU8/CE-2 for VOC control as required by 326 IAC 8-1-2 (a)(2) to achieve the above limit in (a) for rule 326 IAC 8-2-4, a minimum overall control efficiency of 74.00% must be maintained. Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 74.00%, the daily weighted average VOC content of all the coatings shall not exceed 15.46 pounds of VOC per gallon of coating solids as applied.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the coil coating line shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of

this permit, is required for the coil coating line and any control devices.

D.1.4 Nonapplicable Requirements [326 IAC 2-7-15(a)(2)]

The requirements that are not applicable to this coil coating line in accordance with Section B - Permit Shield, of this permit and 326 IAC 2-7-15 have been determined to be as follows:

- (a) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 63) applicable to this coil coating operation. As of permit issuance, there is no NESHAP applicable for coil coating operations.
- (b) This coil coating line is not subject to 326 IAC 8-6-2, since the source was constructed in 1971, which was before the October 7, 1974 applicability date of the rule.
- (c) This coil coating line is not subject to 326 IAC 8-7. Even though the source has potential emissions greater than ten (10) tons per year, since the coil coating line is subject to 326 IAC 8-2-4, it is therefore, not subject to the requirements of 326 IAC 8-7.
- (d) This coil coating line is not subject to 326 IAC 12-1-1 and 40 CFR 60, Subpart TT - Standards of Performance for Metal Coil Surface Coating, since the line was constructed in 1971, and has not been reconstructed or modified after the January 5, 1981 applicability date of the rule.

Compliance Determination Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Testing Requirements [326 IAC 8-1-4] [326 IAC 2-7-6(1)] [326 IAC 2-1.1-11]

Compliance stack tests shall be performed within 60 days upon installation of the regenerative thermal oxidizer, but no later than June 30, 2002. The tests shall be made on the coil coating line, consisting of the prime coating section, identified as EU1 with its regenerative thermal oxidizer, identified as EU4/CE-1 and the finish coating section, identified as EU5 with its recuperative thermal oxidizer, identified as EU8/CE-2 according to 326 IAC 3-6 (Source Sampling Procedures) using the methods specified in the rule or using other methods as approved by the Commissioner to demonstrate compliance with 326 IAC 8-2-4 (Surface coating emission limitations: coil coating operations). This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to this requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

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D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.7 Monitoring (326 IAC 8-2-4)

- (a) The recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2 for VOC control shall be in operation at all times when necessary to comply with the emission limitation specified in Condition D.1.1.
- (b) When operating, both the recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2 shall maintain a minimum operating temperature of 1,150°F for the recuperative thermal oxidizer and 1,200°F for the direct flame finish oxidizer or a minimum temperature, fan amperage and duct velocity as determined by the compliance tests required in Conditions D.1.7. These minimum operating temperatures are required in order to maintain a minimum destruction efficiency of 86.02% and a minimum capture efficiency of 86.02%.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (d) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with 0.31 kilograms per liter of coating excluding water (2.6 pounds per gallon).
 - (1) This device shall have an accuracy of $\pm 2.5^\circ\text{C}$ or ± 0.75 percent of the temperature being measured expressed in degrees Celsius, which is greater.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements [326 IAC 8-1-2] [326 IAC 12-1-1] [40 CFR 60, Subpart TT]

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of use;
- (3) The volume weighted VOC content of the coatings used for each day that any coating with VOC content greater than 2.6 pounds per gallon is used, by:

$$\frac{\text{lb VOC}}{\text{gallon less water}} = 3 \frac{\text{coatings} [\text{Dc} * \text{O} * \text{Q} / [1 - \text{W} * \text{Dc} / \text{Dw}]]}{3\text{C}}$$

Dc = density of coating, lb/gal Dw = density of water, lb/gal
O = weight percent organics, % Q = quantity of coating, gal/unit
W = percent volume of water, % C = total of coatings used, gal/unit

- (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each month; and
 - (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Conditions D.1.1 and D.1.8, the Permittee shall record the dates and times, on an hourly basis, of all periods of startup and shutdown of the recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2.
- (c) To document compliance with Conditions D.1.1 and D.1.8, the Permittee shall record the dates and times, on an hourly basis, of all periods of changeout of coatings when the recuperative thermal oxidizer, identified as EU4/CE-1 and the direct flame finish oxidizer, identified as EU8/CE-2 are not being used.
- (d) To document compliance with Conditions D.1.1 and D.1.8, the Permittee shall also record all periods (during actual coating operations) in excess of three (3) hours during which the average temperature in EU4/CE-1 or EU8/CE-2 (the oxidizers used to control emissions) remains more than 28EC (50EF) below the temperature at which compliance with 0.31 kilograms per liter of coating excluding water (2.6 pounds per gallon) was demonstrated during the most recent measurement of oxidizer efficiency required by D.1.7. The records shall identify each such occurrence and its duration.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) 10.99 mmBtu/hr natural gas process boiler, identified as EU9, constructed in 1971, exhausting to one (1) stack, identified as S-5.

Insignificant Activities

One (1) 9.7 mmBtu/hr waste heat boiler.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from the 10.99 mmBtu per hour process boiler and the 9.7 mmBtu/hr per hour waste heat boiler shall be limited to 0.5358 pounds per mmBtu heat input.

- (a) This limitation is based on the following equation:

$$Pt = \frac{0.87}{Q^{0.16}}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu per hour (lb/mmBtu/hr) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.

- (b) The emission limitations shall be calculated using the equation in (a) where: Q shall reflect the total source capacity on June 8, 1972. The resulting Pt is the emission limitation for each facility existing on that date and will not be affected by the addition of any subsequent facility.

D.2.2 Nonapplicable Requirements [326 IAC 2-7-15(a)(2)]

The requirements that are not applicable to this boiler in accordance with Section B - Permit Shield, of this permit and 326 IAC 2-7-15 have been determined to be as follows:

- (a) This natural gas fired process boiler is not subject to the requirements of the New Source Performance Standard 326 IAC 12, 40 CFR 60.40c, Subpart Dc, because the boiler was constructed in 1971, which was before the January 5, 1981 applicability date of the rule.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (40

CFR 63) applicable to this boiler. As of permit issuance, there is no NESHAP applicable for boilers.

Compliance Determination Requirement

D.2.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.4 Natural Gas Fired Boiler Certification

An annual certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent, no later than April 15 of each year.